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(54) **PRODUCTION OF HIGH-STRENGTH OIL
WELL PIPE HAVING EXCELLENT
CORROSION RESISTANCE**

(57) Abstract:

PURPOSE: To produce the high-strength oil well pipe having excellent sulfide stress corrosion cracking resistance by subjecting a low-alloy steel pipe having a specific compsn. to hardening and tempering under specific temp. conditions, then to plastic working and subjecting the pipe again to hardening and tempering treatments in succession thereto.

CONSTITUTION: The high-strength oil well pipe having the compsn. contg., by weight %, 0.15-0.45% C,

0.1-1.0% Si, 0.3-1.8% Mn, <0.01% SolAl, and 1 or 2 kinds of 0.005-0.1% Ti and 0.01-0.2% Zr, and contg. $N < \{0.002 + (Ti\% + Zr\%)/8\}\%$, <0.005% AlN, or further 1 or ≥ 2 kinds of 0.05-2% Cr, 0.02-0.8% Mo, 0.005-0.2% Nb, 0.005%-0.2% V, and 0.0001-0.003% B is hardened from 880-980°C and is then tempered at 600-730°C. This pipe is subjected to 1-several passes of plastic working at said temp. in such a manner that the total strain quantity attains 1-20%. The pipe is in succession hardened again from 800-950°C and is then subjected to the tempering treatment at 600-730°C. The high-strength oil well pipe having the excellent wear resistance and particularly sulfide stress corrosion cracking resistance is thus produced.

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